

ON THE VALIDITY OF *HAEMAGOGUS SPEGAZZINII* FALCO KUMM
ET AL, 1946

(Diptera, Culicidae)

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Kumm *et al.* (1946) described a new *Haemagogus* from Colombia with hairy larva and male with short palps and bushy antennae, which could be clearly differentiated from *H. capricornii* Lutz, but appeared very close to *H. spegazzinii* Brethes, being separable from the latter species only by details of the mesosome of the male when viewed from the side. The new form was named *falco*, but the describers considered it doubtful whether the characters defining it were of sufficient importance to justify the creation of a new species and placed it as a subspecies of *spegazzinii*. In the same publication the name *H. janthinomys* Dyar, 1921, based on a species from the island of Trinidad, was relegated to the synonymy of *H. spegazzinii spegazzinii*.

Levi Castillo (1956), after examining the male terminalia of the holotype of *H. janthinomys*, concluded that this specimen shows the mesosome tip as in *falco*, and consequently sank *H. spegazzinii falco* Kumm *et al.*, 1946, in the synonymy of *H. janthinomys* Dyar, 1921.

The author is not in agreement with Levi Castillo's conclusions for the following reasons:

1) Cerqueira (1943) published a photomicrograph of the male terminalia of the holotype (then cotype) of *H. janthinomys*. As can be observed in this excellent reproduction, the terminalia is only partly dissected and the mesosome is in ventral view, thus not well oriented to judge the shape of its tip, which, as pointed out by Kumm *et al.* (*loc. cit.*), can best be studied in lateral view.

2) The author, on a visit to the U. S. National Museum, personally examined the holotype slide of the terminalia of *janthinomys*. Although the mesosome in this preparation is not in a good position to permit a conclusive judgment, it appears to belong to an intergrading form between *spegazzinii* and *falco*, close to the so-called "intermediate" type illustrated by Kumm and Cerqueira (1951) from areas of intergradation in Brazil.

3) Kumm *et al.* (*loc. cit.*) in the same paper in which they described *H. spegazzinii falco* from Colombia stated: "the name *janthinomys* becomes a synonym of *H. spegazzinii*, as material obtained from the type area of *spegazzinii*, near Ledesma, Argentina, is the same as that from the island of Trinidad, B.W.I., the type locality of *janthinomys*." This statement shows rather convincingly that these authors had material from Trinidad, as well as from Argentina, in front of them at the time they described *falco*, and found that specimens from Trinidad (*janthinomys*) were closer to type material of *spegazzinii* than to their new form.

4) The terminalia of 10 specimens of "*janthinomys*" from Trini-

dad in the collection of the Gorgas Memorial Laboratory have been dissected by the author and the mesosome mounted in lateral view. These specimens all show some degree of intergradation between *spgazzinii* and *falco*, but appear to be much closer to the former than to the latter (see photomicrographs).

5) More than a hundred mesosomes of males from Honduras, Nicaragua, Costa Rica and Panama examined by the author appear identical with material from Colombia (*falco*) and differ from the mesosomes of males from Trinidad (*janthinomys*.)

6) In mapping out the distribution of *spgazzinii* and *falco*, Kumm and Cerqueira (loc. cit.) show that while *spgazzinii* is quite abundant along the northeastern coast of Brazil, being found all the way up into the State of Amapá along the border with French Guiana, *falco* is not coastal at all but ranges throughout the northwestern corner of Brazil. Specimens from the island of Trinidad would be logically expected to fall closer to *spgazzinii*, the common form along the Atlantic littoral of northern Brazil, rather than to *falco* which is more Andean in distribution.

From these observations the author concludes that typical *falco* extends from northwestern Brazil and adjoining territories in Ecuador and Perú, through Western Venezuela and Colombia as far north as the north coast of Honduras. True *spgazzinii* occurs from northern Argentina and Bolivia, across eastern Brazil to French Guiana. The area of north-central Brazil, most of the Guianas, part of Venezuela, and the island of Trinidad (type locality of *janthinomys*) form a large intergrading zone where mesosomes of intermediate type are found, which neither correspond to typical *spgazzinii* nor to typical *falco*. Since the form *janthinomys* falls in this category, but appears closer to the former than to the latter, the author feels that there is no justification for sinking *H. spgazzinii falco* Kumm *et al.*, 1946, in the synonymy of *H. janthinomys* Dyar, 1921, and suggests that the latter be maintained in the synonymy of *H. spgazzinii spgazzinii* Brethes, 1912, as proposed by Kumm *et al.* (loc. cit.), and that *falco* be considered a valid name to designate a northern and western geographical race of *spgazzinii*.

EXPLANATION OF PLATE

Fig. A, *H. spgazzinii spgazzinii*. Mesosome of a male from "Rio de Janeiro, Brazil (without date) J. Lane"; fig. B, *H. janthinomys*. Mesosome of a male from "St. Pat's, Arima, Trinidad, (8-15)-12-54. T. H. G. Aitken." (Note similarity with mesosome shown in figure A); fig. C, *H. janthinomys*. Mesosome of a male from Tabaquite, Trinidad, (8-13)-1-55. T. H. G. Aitken"; fig. D, *H. spgazzinii falco*. Mesosome of a male from "Chorecha, Chiriqui, Panama, 5-6-50. P. Galindo." (Note differences with figures B and C); fig. E, *H. spgazzinii falco*. Mesosome of a male from "Rio Mesapa, El Negrito, Department of Yoro, Honduras, 4-9-54. P. Orjuela. (Northernmost specimen of the species thus far collected).



B



C



A



D



E

REFERENCES

- Cerqueira, N. L., 1943. Algumas espécies novas da Bolivia, e referencia a tres espécies de *Haemagogus*. Mem. Inst. Oswaldo Cruz 39: 1-14.
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- Levi-Castillo, R. 1956. A systematic note on *Haemagogus spegazzinii* Brethes, 1912. Proc. Ent. Soc. Wash. 58: 345-347.

INSECTS OF MICRONESIA, HOMOPTERA: FULGOROIDEA

by R. G. Fennah. Paper, Bernice P. Bishop Museum, Insects of Micronesia 6(3):[39]-211, 64 figs. Price \$3.00.

This work will be an indispensable tool for specialists working in Fulgoroidea of the included Pacific area for many years to come. The introduction includes a resume of the distribution of the 54 genera and 135 species known from Micronesia, a reasonable discussion of the probable sources of the Micronesian fauna in the groups studied by the author, and a charmingly frank account of the interpretation placed on degrees of morphological differences in the ease of groups below the genus category. The last appeared quite reasonable to the reviewer and undoubtedly it will appear so to others engaged in taxonomy in the seclusion of a laboratory where, like Fennah's, their evaluation of categories must rest on an appraisal of degrees of morphological differences, although "it is fully realized how poor an alternative such assessment must be for actual experimental investigation."

Although the work lacks keys in some groups (e.g., *Myndus* with 18 forms), the included keys offer bonuses in several instances, in that they include more than the area under treatment: the key to families is for the world, the generic key of Cixiidae includes the Philippine Islands and Australasia, and the latter area is included also in the generic keys of Delphacidae and Derbidae.

A minor weakness, but one worthy of comment because it occurs so commonly in works in Homoptera, is associated with Fennah's treatment of the subgenus *Sogatella* which in this and one previous work he has discussed clearly enough to make it obvious that several Western Hemisphere taxa should be included in the concept. One cannot doubt that the author was well aware of this, yet he failed to mention the forms by name. If other specialists, in making identifications (for field workers, for example) of the Western Hemisphere taxa place them in *Sogatella*, the publication of the new combination may, as a result, occur in some obscure organ not readily available to those who catalogue taxonomic literature. If the identifier purposely avoids this pitfall, and uses the older combination, he is placed in the position of delaying taxonomic progress. The reviewer subscribes to the opinion that it would have been preferable for Fennah to list by name all of the taxa he felt should be placed in his category *Sogatella*.

The descriptions are well written and the illustrations excellent and well arranged.—DAVID A. YOUNG, JR., *Entomology Research Branch, U. S. Department of Agriculture*.